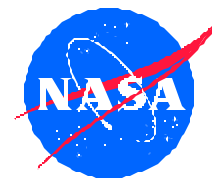


High Temperature Foil Thrust Bearing



*Mohawk Innovative Technology, Inc.
Albany, NY*

INNOVATION

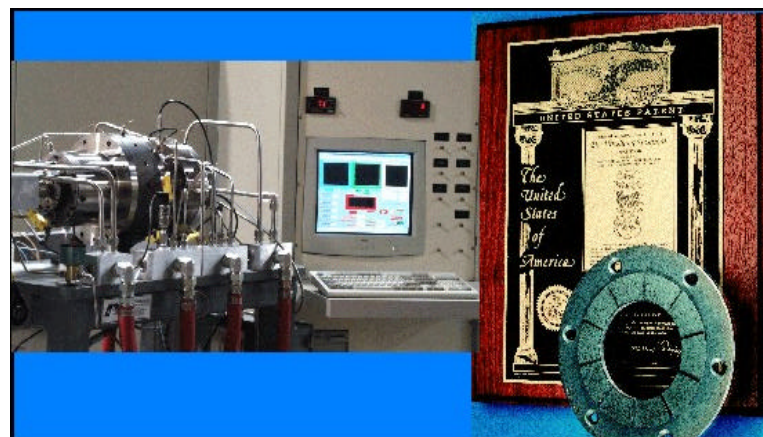
A totally oil-free, high-temperature and high-speed test rig for developing advanced foil thrust bearings

ACCOMPLISHMENTS

- ◆ Performance of MiTi® oil-free compliant foil thrust bearings measured at greater than 1000F and 1800 ft/sec
- ◆ A development test rig has been delivered to NASA
- ◆ Totally oil-free operation at 80,000 rpm speeds under thrust loads to 700 lbs and elevated temperatures exceeds any existing thrust bearing development rig

COMMERCIALIZATION

- ◆ MiTi® Compliant Foil Thrust Bearing has sales to date; \$794,637 including both a development test rig and compliant foil thrust bearings
- ◆ MiTi® holds a total of eight compliant foil bearing patents
- ◆ \$3.4M in Phase III contracts with NASA GRC for fabrication and delivery of a thrust bearing rig and aircraft engine test bearings



*Development Rig and
Patented Thrust Foil Bearing*

GOVERNMENT/SCIENCE APPLICATIONS

- ◆ Supports NASA's General Aviation Revitalization Initiative and Oil-Free Turbomachinery Program
- ◆ Interest by US Army and Air Force for helicopter, UAV and Expendable Turbine Engine Concepts
- ◆ SBIR technology will support reduced fuel consumption and maintenance costs through reduced parts counts and elimination of oil lubrication system in aviation gas turbine engines